

OUTLINE GUIDE FOR JANIS 154

Purpose of a JANIS Study: "To make available one publication containing all the necessary detailed information upon which may be based a war plan for military operations in a given area."

CHAPTER RESPONSIBILITY

<u>Chapter</u>		<u>Responsible Agency</u>
I	BRIEF	JISPB
II	MILITARY GEOGRAPHY	MID
III	OCEANOGRAPHY	ONI
IV	COASTS AND LANDING BEACHES	ONI
V	CLIMATE AND WEATHER	A-2
VI	PORT FACILITIES	ONI
VII	TRANSPORTATION AND COMMUNICATIONS	OSS
VIII	CITIES AND TOWNS	OSS
IX	RESOURCES AND TRADE	OSS
X	PEOPLE AND GOVERNMENT	OSS
XI	HEALTH AND SANITATION	MID (SGO)
XII	DEFENSES	MID
XIII	NAVAL FACILITIES	ONI
XIV	AIR FACILITIES	A-2
APPENDIX I	GEOGRAPHICAL GLOSSARY	BD. ON GEOG. NAMES

INCLOSURE #2

- 1 -

OUTLINE GUIDE FOR

JANIS

CHAPTER I

BRIEF

10. Physical Elements.

- A. Orientation and military geography.
- B. Oceanography.
- C. Coasts.
- D. Landing places.
- E. Meteorology and climatology.

11. Cultural Elements.

- A. Cities and towns.
- B. Resources and trade.
- C. Communications.
- D. Transportation.
- E. Port facilities.
- F. People and government.

12. Military Elements.

- A. Defenses.
- B. Air facilities.
- C. Naval facilities.
- D. Seaplane stations and alighting areas.

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Chapter II

Military Geography.

20. General Description (A brief summary of chapter).

- A. Relief characteristics.
- B. Drainage and water supply.
- C. Vegetation characteristics.
- D. Natural critical areas.

Describe large islands and important small islands as follows:

21. Relief.

- A. General description of relief (and introduction of regional subdivision which is treated in detail in 21B).
- B. Relief description by regions (to include such materials as: Defensive phase lines, effects on movement, corridors).

22. Drainage and Water Supply.

- A. General description of lakes, swamps and streams.
- B. Relation of drainage to military operations (to include specific description of drainage of each relief region including such material as: Water supply, effect on movement, width, depth, bottom, flow, banks, navigability).

23. Soil Trafficability (consult with contributor of Chapter V).

- A. General factors affecting soil trafficability.
- B. Soil trafficability by regions and/or seasons.

24. Vegetation.

- A. General types of vegetation cover.
 - (1) Uncultivated.
 - (2) Cultivated.
- B. Relation of vegetation to military operations.
(Detailed description of uncultivated and cultivated vegetation within each relief region. To include such material as: Cover, concealment, camouflage, seasonal change, effect on movement and combat).

25. Regional Summary (tabular form; to include a summary of relief, drainage, vegetation, natural water supply and seasonal change for each of the relief regions). Small islands not treated in detail may be included in table.

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26. Natural Critical Areas.
 - A. General description.
 - B. List of natural critical areas with brief statement on each.
27. Routes to Natural Critical Areas.
 - A. General description.
 - B. Detailed description of each route. (To include such material as potential defense lines, soil trafficability, seasonal characteristics, etc.)
28. Bibliography.

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CHAPTER III

OCEANOGRAPHY

30. General Description.

- A. Tides.
- B. General circulation.
- C. Sea and swell.
- D. Sea water characteristics.
- E. Bottom sediments.

31. Tides and Currents.

- A. Tides.
 - (1) Tidal differences and constants.
 - (a) Time differences.
 - (b) Height differences.
 - (c) Ranges.
 - (d) Levels.
 - (2) Sun, moon, and tides.

B. Tidal and local currents.

C. General circulation.

32. Sea and Swell.

- A. Sea.
 - (1) Amounts of sea.
 - (2) Direction of seas.
 - (3) Relationship between wind velocity and state of sea.

- B. Swell.
 - (1) Amount of swell.
 - (2) Direction of swell.

C. Local sea and swell conditions (optional).

33. Sea Water Characteristics.

- A. Surface and subsurface temperature.
 - (1) Seasonal variation of surface temperature.
 - (a) Horizontal distribution.
 - (b) Temperature range.
 - (c) Ice.
 - (d) Relationship between sea and air temperature.
 - (e) Fog.
 - (2) Variation of temperature with depth.
- B. Surface and subsurface salinity.
 - (1) Seasonal variation of surface salinity.
 - (a) Horizontal distribution.
 - (b) Salinity range.
 - (c) Electrical conductivity.
 - (2) Variation of salinity with depth.

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- C. Density.
 - (1) Horizontal distribution of surface density.
 - (2) Variation of density with depth.
 - (3) Use of density gradients by submarines.
- D. Acoustic conditions.
 - (1) Seasonal variation.
 - (2) Variation with depth.
 - (3) Background noise.
- E. Transparency and color of water.
 - (1) Transparency.
 - (2) Color
- 34. Bottom Sediments.
 - A. Characteristics of sediment types.
 - B. Horizontal distribution.
- 35. Biological Factors.
 - A. Algae and seaweeds.
 - B. Bioluminescence ("phosphorescence").
- 36. Bibliography.
- 37. Brief Summary of Chapter.

CHAPTER IV

COASTS AND LANDING BEACHES

40. General Description.

- A. Coasts.
- B. Landing beaches.

41. Detailed Description of Region A-Luzon and Outlying Islands.

- A. Single island or major division of coast; first segment or minor division (if warranted).

- (1) Coastal topography (avoid mention of beaches except as landmarks. Description should be primarily for use of ship master or naval commander, not for landing party).
- (2) Approaches and anchorages (deal largely with area seaward of 5-fathom line).
- (3) Dangers to navigation (deal largely with area seaward of 5-fathom line).
- (4) Landing beaches (exclude general coastal description).
 - (a) Single beach or group of closely related beaches.
 - 1. Location and extent (give location of beach, not of coastal segment; length, width, and shape of beach; location with regard to landmarks and developed areas).
 - 2. Nearshore (deal largely with area shoreward of 5-fathom line; bottom gradient and character of bottom; location and depths of reefs, bars, rocks, shoals, and other dangers; anchorage areas; local conditions of winds, tides, currents, waves and water temperatures).
 - 3. Character of beach (physical consistency; gradient; surf and currents; structures such as groins and bulkheads; location of rivers and streams entering or crossing beach; tidal flats and salt marsh, including consistency of bottom; local use; local weather peculiarities; sources of water -- potable and non-potable; areas suitable for landings).

4. Adjacent terrain and exits. (Topography inland and on flanks of beach; roads, trails, waterways, and cross-country exits; emergency landing places for aircraft; nearest potable water; nearest radio, telephone, and telegraph; telephone, telegraph and power lines; power plants; railroads; habitations).

(b) Single beach or group of closely related beaches.

- B. Single island or major division of coast; second segment or minor division (if warranted).

(1) (2) (3) (4) as above.

- C. Single island or major division of coast; third segment or minor division.

(1) (2) (3) (4) as above.

- D. Single island or major division of coast.

(1) (2) (3) (4) as above.

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NOTE: When descriptions of landing beaches (4) are brief, entire description can be run without sub-headings. When several closely related landing beaches are described as a unit, further subdivision by beaches can be made under headings 1 2 3 4.

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42. Detailed Description of Region B-Mindoro, Marinduque, Tablas, Sibuya and Small Islands.
43. Detailed Description of Region C.
44. Detailed Description of Region D.
45. Detailed Description of Region E.
46. Brief Summary of Chapter.
47. Bibliography.

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CHAPTER V

CLIMATE AND WEATHER

- 50. General Description.
 - A. Climate
 - B. Weather.
- 51. Operational Significance of Climate and Weather.
(A concise strategic analysis, with one over-all citation of Topics 52 and 53 for details.)
 - A. Ground operations.
 - B. Air operations.
 - (1) Low level operations.
 - (2) High level operations.
 - (3) Incendiary bombing.
 - (4) Parachute operations.
 - C. Naval operations.
 - D. Amphibian operations.
 - E. Chemical warfare.
- 52. Climate.
(The main body of the chapter, with basic data discussed by elements, with chief tables.)
 - A. Precipitation.
 - B. Temperature.
 - C. Humidity.
 - D. Surface wind.
 - E. Sea and swell.
 - F. Upper air wind.
 - G. Cloud
 - (1) Cloudiness.
 - (2) Ceiling.
 - H. Turbulence and thunderstorms.
 - I. Icing.
 - J. Visibility, fog, haze, dust, smoke.
 - K. Other climatic elements.
- 53. Synoptic Weather Types and Forecast Techniques.
- 54. Soil Trafficability (consult with contributor of Chapter II).
- 55. Brief Summary of Chapter.
- 56. Bibliography.

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CHAPTER VI

PORT FACILITIES

60. General Description.

A. Major ports (define basis of selection between A and B).

B. Minor ports.

61. Major Ports.

A. Name of port.

- (1) Harbor (location, type, depth, size, shelter, anchorage, weather*, tides, number and size of berths).
- (2) Landing facilities (summary statement and tabular description by piers or quays, including warehouses, supply dumps, harbor craft).
- (3) Clearance facilities (related specifically to cargo handling at port).
- (4) Availability of supplies (water, oil, coal, electricity, and other, specifically important to ships).
- (5) Repair facilities (drydocks, marine railways, repair plants).

62. Minor Ports.

(Subtopics as in 61).

63. Bibliography.

* Information submitted in this chapter, which is dealt with in other JANIS chapters, should be specific data relating to special features of port under discussion, and should be as brief as possible.

OUTLINE GUIDE FOR

JANIS

CHAPTER VII

TRANSPORTATION AND COMMUNICATIONS

70. General.

- A. Transportation.
- E. Communications.

71. Railroads.

(Pattern and strategic value; administration; track and right-of-way; type of motive power; ballast and standards of roadbed construction; locomotive and rolling stock equipment; repair facilities and yards; volume of freight and passenger traffic; capacity of lines with--existing and additional, rolling stock; vulnerable points.)

72. Roads and Trails.

(Pattern of system; effect of climate and weather; adjacent terrain; weight--axle load--of largest vehicle to use various road types; administration; standards of construction and quality; maintenance facilities; capacity. Description of main roads; repair facilities; water, gasoline and oil available.)

73. Water Transport.

- A. Coastal and inter-island water transport
(Routes both regular and irregular, ports-of-call; frequency of sailings; types of vessels used, native crews.)
- B. Inland water transport
(Rivers, canals, lakes, lagoons; channels; water sources; traffic; capacity; hauling facilities; vulnerability)

74. Radio.

- A. The radio system (broadcasting stations, administration, reception of broadcasts).
- B. Point-to-point communication.
- C. Communication with aircraft.
- D. Communication with ships.
- E. List of radio stations.

75. Telegraph.

(Pattern of network and localization of lines; stations; route equipment; local stocks of construction materials; standard of maintenance; administration; availability of trained personnel; vulnerable features.)

76. Telephone.

(Pattern of network and localization of lines; trunk lines, rural lines; centrals; route equipment.)

77. Submarine cables.

(Port of arrival and farther terminus; administration; equipment; facilities for repair and storage of reserve supplies; present condition; vulnerable features.)

78. Bibliography.

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Chapter VIII

Cities and Towns.

80. General description.

- A. Degree of urbanization.
- B. Classification of cities, towns, and villages by
 - (1) Chief function: commercial, industrial, political, etc.
 - (2) Importance: strategic, political, commercial, etc.

81. Description of Cities.

- A. Name of city - population.
 - (1) Importance from standpoint of strategic position, trade, population, political significance, etc.
 - (2) Physical characteristics.
 - (a) Relation to surface features.
 - (b) Shape and dimensions.
 - (c) Degree of compactness.
 - (d) Differentiated sections - commercial, residential, industrial, etc.
 - (e) Street plan.
 - (f) Chief open spaces.
 - (3) Means of access.
 - (4) Buildings.
 - (5) Billeting facilities.
 - (6) Internal transportation.
 - (7) Repair and service facilities.
 - (8) Public utilities.
 - (9) Warehouses and storage.
 - (10) Health and sanitation facilities.
 - (11) Vulnerable points.
 - (12) War damage estimate.

B. Name of city (1 to 12 as 81A).

C. Name of city, etc. (1 to 12 as in 81A).

82. Description of Towns (1 to 12 as 81A).

83. Description of Native Villages.

- A. Name of village.

(Use outline for towns for basic description. Narrative style may be used in the case of settlements where material is meagre and does not lend itself to outline form).

84. Bibliography.

CHAPTER IX

RESOURCES AND TRADE

90. General Description.

- A. Food resources.
- B. Water supply.
- C. Construction materials.
- D. Industrial raw materials and primary processing.
- E. Manufacturing plants.
- F. Electric power.
- G. Commerce.
- H. Finance.

91. Food Resources.

- A. Agriculture. (Type and location of farming areas and production by islands including livestock, time of planting and harvesting, annual regional surplus.)
- B. Fisheries. (Production, equipment, ports and facilities.
- C. Processing, refrigeration and storage (location, equipment, capacity, etc.)

92. Water Supply.

- A. Natural availability by islands or groups of islands.
- B. Developed sources (location, type, capacity, quality).
- C. Distribution, use and storage (for each island).

93. Construction Materials.

(Location, distribution, reserves, ownership, quality, and quantity of wood, stone, clay, sand, gravel, lime, cement stone, etc.)

94. Industrial Raw Materials and Primary Processing.

- A. Minerals.
(Location, production, stocks and storage facilities, distribution, reserves, mining methods, power-water-fuel requirements, ownership, labor availability and quality, vulnerability to sabotage and bombing of; iron and alloy metals; non-ferrous metals; asbestos, sulfur, etc.)
- B. Fuel (coal, wood and petroleum).
(Sources, quantity, stocks and storage facilities, ownership, labor availability, fire hazard in forests.)
- C. Agricultural and marine materials.
(Sources--amount, quality, producing areas, stocks and storage facilities, possibility of expanding production, distribution by use.)

95. Manufacturing Plants (list by products).

(Location, physical description, production, raw materials used, destination of final product, power-water-fuel requirements, labor quality and availability, vulnerability to sabotage and bombing, usefulness to invading forces.)

96. Electric Power (by islands).

- A. Electric plants.
(Location, type, vulnerability; capacity in k.w., k.v.a. or h.p., and size; K.W.H. output; current characteristics; transmission, distribution, and area served; operator; source of replacement parts.)
- B. Consumer distribution.
(Type of current; types of plugs and appliances; (source of power); transformer and substations; transmission--overhead or underground; power consumed in K.W.H.; loads--maximum recorded and totals connected in k.w.; principal use; available surplus power.)

97. Commerce.
(Characteristics of traffic, inter-island and foreign).
98. Finance (Japanese and native systems in area separately, if data available).
99. Bibliography.

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CHAPTER X

PEOPLE AND GOVERNMENT
(In area only)

- 100. General Description.
 - A. Filipinos.
 - B. Others.
- 101. Population - Physical Characteristics.
 - A. Filipinos.
 - B. Others.
- 102. Population - Cultural Characteristics and Social Conditions.
 - A. Filipinos.
 - B. Others.
- 103. Suitability of Inhabitants for Labor.
(Energy, skill, reliability, attitude, strength, etc.).
- 104. Governmental Organization (Local).
- 105. Security and Public Order.
- 106. Political Factors.
- 107. Bibliography.

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CHAPTER XI

HEALTH AND SANITATION

- 110. General Description.
- 111. Environment.
 - A. Water.
 - B. Waste disposal.
 - C. Animals.
 - (1) Vectors of disease.
 - (2) Dangerous animals.
 - (3) Pests.
 - D. Plants.
 - E. Food.
- 112. Public Health and Medical Facilities.
 - A. Public health organization.
 - B. Hospitals and medical institutions.
 - C. Medical personnel (in broadest sense -- dentists, veterinarians etc.)
 - D. Social service agencies.
- 113. Diseases.
 - A. Diseases of military importance.
 - (1)
 - (2)
 - B. Diseases of potential military importance.
 - (1) Endemic diseases.
 - (2) Disease which may be introduced.
 - C. Diseases of minor military importance.
 - D. Diseases common among civil population.
 - E. Miscellaneous diseases.
- 114. Recommendations (in order of importance).
- 115. Bibliography.

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CHAPTER XII

DEFENSES

120. General Description.

- A. Position and importance (in Japanese strategy).
- B. History and development.

121. Organization of Army and Navy defense forces (position in Japanese organization).

- A. Administration.
- B. Tactics.
- C. Normal disposition of forces (materiel and personnel).
- D. Labor battalions (non-combat).

122. Supply and Maintenance.

- A. Depots. (Name, location, capacity and general description of supply and maintenance depots.)
- E. Supply routes (to and in area).

123. Fortifications. (Include map overlay.) (List the defended ports and isolated landing beaches according to name, each a lettered subtopic, and under each show the available information under 15 subparagraphs as follows).

(1) Coast defense batteries.

- Name of battery
- Number of guns (distinguished between guns, howitzers, and mortars)
- Caliber of guns
- Exact model of guns
- Exact location of emplacements
- Detailed description of emplacements
 - Camouflage
 - Protection for gun and crew
- Detailed description of guns
 - Maximum range
 - Effective range
 - Type of loading
 - Rate of fire
 - Rate of traverse
 - Types of projectiles available
 - Color of dye of projectiles assigned to each gun
 - Number of men in each gun crew
 - Replacement crews available
- Ammunition dump, its exact location, and protection
 - Method of bringing ammunition to guns
- Arc of fire of guns
- Landmarks to identify battery from seaward
- Location and detailed description of base and stations,
 - CP's, rangefinders, directors, plotting rooms and searchlights
- Method of communication with guns
- Local defenses
 - AA guns
 - Machine guns, trenches, wire entanglements
 - Personal weapons of crew
- Places of the battery in the general organization of coast artillery
- Total number of men in the administrative battery

(2) Emplaced field artillery batteries.

- Same information required as for (1) above, with appropriate modifications
- Railway artillery which could be emplaced along a coast is to be described under this heading.

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(3) Medium AA batteries.

Same information required as for (1) above, with appropriate modifications

Maximum and effective vertical and horizontal ranges

Depth below surface

Nature of swells in the area.

(4) Air warning systems.

Lookout stations and equipment

Radar installations

Communication systems

Reaction to alerts.

(5) Location Mobile defense troops.

Defense capabilities and means of concentrating at fortified areas or beaches

Reinforcement capabilities from within the area and from outside the area.

(6) Miscellaneous.

Barrage balloons

Submarine detector equipment

Smoke generating apparatus

Beach patrols and observation posts.

124. Potential Defense Areas (include map overlay).

Repeat subtopics under 123 as applicable.

125. Bibliography.

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CHAPTER XIII

NAVAL FACILITIES

130. General Description.

- A. Position and importance of area in Japanese naval activity.
- B. History and development of Japanese naval installations in area.

131. Organization (position in Japanese organization).

- A. Administration.
- B. Tactics (as applicable).
- C. Normal disposition of forces (ships and personnel within area).

132. Supply and Maintenance.

- A. Depots. (Name, location, capacity and general description of supply and maintenance depots.)
- B. Repair ships. (Class, anchorage, capacity and general description of repair ships or tenders usually stationed in area.)
- C. Supply routes (to and in area).

133. Naval Bases and Stations (include map overlay showing these). List the bases and stations according to name, each a lettered subtopic, and under each show the available information under the numbered paragraphs as follows:

- A. Name of station.
 - (1) General description sketches, photographs, maps, etc., showing location, arrangement and extent.
 - (2) Harbor (type of harbor and nature of port, indicating depth, size, shelter, character of coast, customary use and arrangement.)
 - (3) Entrance channel.
 - (4) Anchorages (area, depths, holding ground, landmarks).
 - (a) Outer harbor.
 - (b) Inner harbor.
 - (5) Significant hydrographic features (tides, currents, sea, swell, etc.).
 - (6) Unloading facilities (general description of strength, character and capacity of piers, wharves, quays and other facilities).
 - (a) Description of a unit (or pier). (Here include a table, showing by units (No. and location)
 - (Type and use)
 - (Dimensions and depths alongside, including length of berthing space)
 - (Transit sheds, or other stowage)
 - (Cranage, including number, type, capacity reach and motive power)
 - (Rail or road connections)
 - (Capacity for general cargo)
 - (Facilities for night handling)
 - (b) Description of another unit. (Subtopics as under (a)).
 - (c) Description of another unit.
 - (d) Description of other units or beaches.
 - (7) Other cranage (including floating).
 - (8) Warehouses, storage facilities, supply dumps.
 - (a) Warehouses (including capacity, type and reach of appliances railroad sidings and truck platforms, type and capacity of receipt and shipping appliances).
 - (b) Supply dumps (including areas suitable for dumps, indicating location, area and transportation facilities).

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- (9) Other unloading places (including beaches, submerged vessels, etc.).
 - (10) Harbor craft.
 - (11) Facilities for clearing port.
 - (a) Railroad.
 - (b) Road - type of paving, width, etc.
 - (c) Water.
 - (d) Other.
 - (12) Labor.
 - (a) Organized battalions.
 - (b) Native labor.
 - (13) Capacity.
 - (a) Estimated daily unloading.
 - (b) Estimated daily loading.
 - (14) Supplies - availability.
 - (a) Water (source, amount, quality, servicing).
 - (b) Oil and gasoline (bunkering and storage tank capacity, stocks, servicing).
 - (c) Coal (bunkering capacity, method and rate of delivery, stocks, servicing).
 - (d) Construction materials.
 - (Concrete aggregate, lumber, etc.).
 - (e) Electricity.
 - (15) Repair facilities.
 - (a) Drydocks (location, dimensions, capacity).
 - (b) Marine railways (location, dimensions, capacity).
 - (c) Marine repair plants and shops (facilities, capacity).
 - (16) Vulnerability.
 - (17) Camouflage.
 - (18) Landmarks to identify from seaward.
134. Potential Naval Bases and Stations (include map overlay).
(Repeat subtopics under 123 as applicable).
135. Bibliography.

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CHAPTER XIV

AIR FACILITIES

- 140. General Description.
 - A. Position and importance of area to Japanese air operations.
 - B. History and development of Japanese Air Activity in area.
- 141. Organization (position in Japanese organization).
 - A. Administrative (if available).
 - B. Tactical (if available).
 - C. Normal disposition of forces, aircraft and personnel (if available).
 - D. Labor battalions, non-combatant, (if available).
- 142. Supply and Maintenance.
 - A. Depots (name, location, capacity and general description of supply and maintenance depots).
 - B. Supply routes (to and in area).
- 143. Airfields (detailed description, by sketches, photographs and tabulated data as applicable).
 - A. Name of airfield.
 - (1) General description (local position, coordinates, elevation, runway directions and dimensions, estimated operational capacity, number of revetments, dispersal facilities).
 - (2) Facilities.
 - a. Fuel storage and servicing.
 - b. Night operation.
 - c. Repair and storage facilities for aircraft, engines and instruments.
 - (3) Field condition.
 - a. Runways, material used in construction, condition, slope, hazards.
 - b. Field.
 - (1) General condition, including drainage, type of soil, condition in rainy season, possibility of enlargement.
 - (4) Permanent defenses (include ammunition dumps).
 - B. Name of airfield (1 to 3 as in 3A).
- 144. Landing Grounds (detailed description, by sketches, photographs and tabulated data as applicable).
 - A. Name of landing ground.
 - (1) General description. Local position, coordinates, elevation, dimensions, estimated operational capacity, dispersal facilities.
 - (2) Facilities - whatever available.
 - (3) Field condition - surface, slope, drainage, hazards, possibility of enlargement.
 - (4) Defenses (include ammunition dump).
- 145. Possible landing sites - consider terrain, nearness to transportation and communication facilities, location, availability of construction materials.
- 146. Seaplane stations and alighting areas.
 - A. Name of station.

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- (1) General description (sketches, photographs, tabulated data, showing location, altitude, magnetic variation and annual change, local position, landmarks, obstructions and dimensions).
 - (2) Sea conditions and anchorage (wind, shelter, swell, chop and currents in various seasons, depth of water, bottom holding ground, mooring buoys, aids to navigation and dispersal facilities).
 - (3) Slipways (aprons, beaches, jetties, quays, cranes, boats and vehicles).
 - (4) Facilities (fuel storage and servicing, water, hangars and workshops, power, general and ammunition storage, accommodation, possibility of enlargement).
 - (5) Permanent defense system (including ammunition dumps).
147. Emergency Seaplane Alighting Areas and Potential Seaplane Stations (Consider terrain, sea conditions, nearness to transportation and communication facilities, location, availability of construction materials).
148. Bibliography.